C4590-3

November 1984/$2.00

paper board packaging

THE INSTITUTE OF PAPER CHEMISTRY
1043 EAST SOUTH RIVER STREET
APPLETON, WISCONSIN 54912

RUGATED UTTING:

ill rotary ush atbed?

Bar Coding Corrugated
IPEX/AICC Review
TenCorr: A Team Effort

AN HBJ PUBLICATION

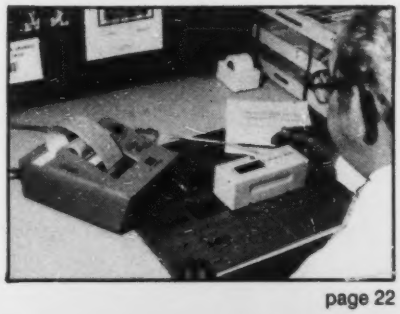
paperboard packaging

NOVEMBER 1984, VOLUME 69, No. 11.

On the Cover:

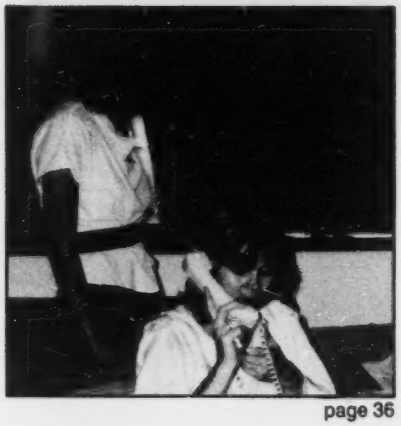
How big a piece of the pie can rotary diecutting wrest from flatbed? See feature starting on page 37. (rotary dies courtesy of Jonco Die Co., Minneapolis)

FEATURES



page 22

page 32



page 36

PRINTING AND GRAPHICS

22 **A U.S. Case History: Bar Coding Corrugated**

"The only way the case code program can provide retailers and suppliers the real-time data they need is if converters print symbols that meet the established specifications."

MEETINGS AND CONVENTIONS

32 **Speakers and Weather Sizzle at AICC Convention**

The 10th Anniversary of the Association of Independent Corrugated Converters had entertaining business sessions, a busy trade fair—and plenty of heat and sunshine.

COMPUTERS

35 **Toronto Corrugator Is Streamlined to the Max**

TenCorr Packaging sells board to a consortium of Canadian independents, victims of a labor strike who all got tired of paying the seller's-market price for U.S. board.

DIECUTTING

37 **Will Rotary Roll Over Flatbed?**

by Mark Arzoumanian

The feedback from corrugated container converters centers on degrees of accuracy needed and what diecutting method can do the job. Cost has also become a major concern.

SHOWS AND EXHIBITIONS

46 **IPEX Expands Its Scope**

by Mark Arzoumanian

A record number of 84,145 visitors took in 1246 exhibitors from 34 countries at the National Exhibition Centre in Birmingham, England.

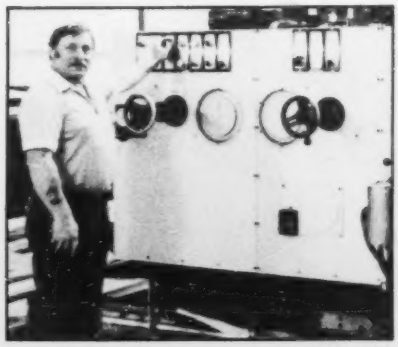
(continued on page 4)

PAPERBOARD PACKAGING (ISSN 0031-1227) is published monthly by Magazines For Industry, Inc., a subsidiary of Harcourt Brace Jovanovich Publications. Corporate and Editorial offices: 7500 Old Oak Boulevard, Cleveland, Ohio 44130. Advertising offices: 747 Third Avenue, New York, New York 10017 and 111 East Wacker Drive, Chicago, Illinois 60601. Accounting, Advertising Production and Circulation offices: 1 East First Street, Duluth, Minnesota 55802. Subscription rates: $18 per year in the United States; $25 per year in Canada. All other countries: $35 per year. Single copies (pre-paid only): $2 in the U.S.; elsewhere $4.50; add $3.00 for shipping and handling per order. Second class postage paid at Duluth, Minnesota 55806. Copyright © 1984 by Magazines For Industry, Inc., a subsidiary of Harcourt Brace Jovanovich, Inc. All rights reserved. No part of this publication may be reproduced or transmitted in any form or by any means, electronic or mechanical including photocopy, recording, or any information storage and retrieval system, without permission in writing from the publisher. Microfilm copies of articles are available through University Microfilm, International, 300 N. Zeeb Road, Ann Arbor, Michigan 48106.

POSTMASTER: Send address changes to PAPERBOARD PACKAGING, P.O. BOX 6269, Duluth, Minnesota 55806.

For reprint information, call Mary Ellen Levey: 218-723-9373

FEATURES *continued*



page 54

DIECUTTING

54 **California Farmers Welcome New Boxmaker**

Building a converting operation around a fast new diecutter, Visalia Packaging Corp. is now gearing up a corrugator and resurrecting some well-selected used converting machinery.

OPERATIONS MANAGEMENT

56 **Small Sheet Plant Makes Big Profits**

Orange Container Inc., Santa Ana, Calif., has built a lucrative business by scoring bullseye on selection of software, an impressive diecutter, and economically priced flexos.

DEPARTMENTS

6	Comment	61	New Products
10	News	65	Literature
14	Personal View	69	New Box Products
16	Industry Statistics	72	Industry Events
58	Product of the Month	74	Classified Ads
59	People	79	Ad Index
60b	World News Briefs	80	Publisher's Report
		81	Reader Service Card

COMING

December: Industry Calendar/Package Designing

January: Industry Forum/Equipment Status

February: European Preprint/MSU School of Packaging

STAFF

Publisher ..... **Richard Perkins**
Editor ..... **Mark Arzoumanian**
Senior Editor ..... **Fred Sharring**
Associate Editor ..... **Robert Gitlin**
European Editor ..... **Robert Higham**
Consulting Editor ..... **Richard W. Porter**
Assistant Editor ..... **Shirley Harte**
Executive Editor ..... **Ben Miyares**
Production Supervisor ... **Debra M. Barmby**
Production Manager ..... **Terri Sward**
Graphics Director ..... **Jon Dallman**
Graphic Designer ..... **Robert Andresen**
Circulation Supervisor ..... **Lil Pearson**
Reader Service Manager ..... **Gail Kessler**
Promotion Director ..... **Linda Winick**

Board of Contributing Editors

Training: Loren Ashwood, Consultant
Quality Assurance: George G. Maltenfort, Consultant

Administration: Allan S. Voluck, President, United Container Company
International:
France: Maurice Pariat, Consultant
UK: John A. Moore, Consultant
Australia: John Landman, Consultant

Editorial Offices

Paperboard Packaging
7500 Old Oak Boulevard, Cleveland, OH 44130 ☐ 216-243-8100 ☐ Telex: 968918
111 E Wacker Drive, Chicago, IL 60601 ☐ 312-938-2351
747 Third Avenue, New York, N.Y. 10017 ☐ 212-418-4145 ☐ Telex: 968918

Official Board Markets
111 E. Wacker Drive, 17th floor Chicago, IL 60601 ☐ 312-938-2335

Europe
HBJ Publications, 24-28 Oval Road, London NW1 7DX ☐ Telex: 25775

Marketing Sales Offices

Eastern
Ralph D. Wheeler ☐ 747 Third Avenue, New York, N.Y. 10017 ☐ 212-418-4145 ☐ Telex: 968918

Midwest & West Coast
Richard Perkins ☐ 111 E. Wacker Drive, Chicago, IL 60601 ☐ 312-938-2351
Brian McGoldrick ☐ 111 E. Wacker Drive, Chicago, IL 60601 ☐ 312-938-2338

Europe
Dee Wakefield ☐ HBJ Publications, 24-28 Oval Road, London NW1 7DX ☐ Telex: 25775

Japan
Sumio Oka ☐ International Media Rep., Ltd., 2-29 Toranomon 1-chome, Minato-ku, Tokyo, 105 Japan, 502-0656 ☐ Telex: J22633 ☐ Cables: MEDIAREP TOKYO

Harcourt Brace Jovanovich Publications

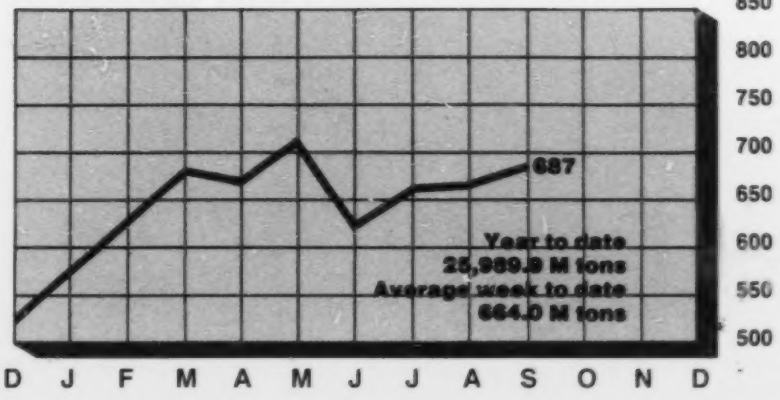
Robert L. Edgell, Chairman ☐ **Richard Moeller,** President ☐ **Lars Fladmark,** Executive Vice President ☐ **Arland Hirman,** Treasurer ☐ **Thomas Greney,** Senior Vice President ☐ **Ezra Pincus,** Senior Vice President ☐ **Joe Bilderbach,** Vice President ☐ **James Gherna,** Vice President ☐ **George Glenn,** Vice President ☐ **Harry Ramaley,** Vice President ☐ **Don Gussow,** V.P. Editorial

HBJ A HARCOURT BRACE JOVANOVICH PUBLICATION

BPA ABP

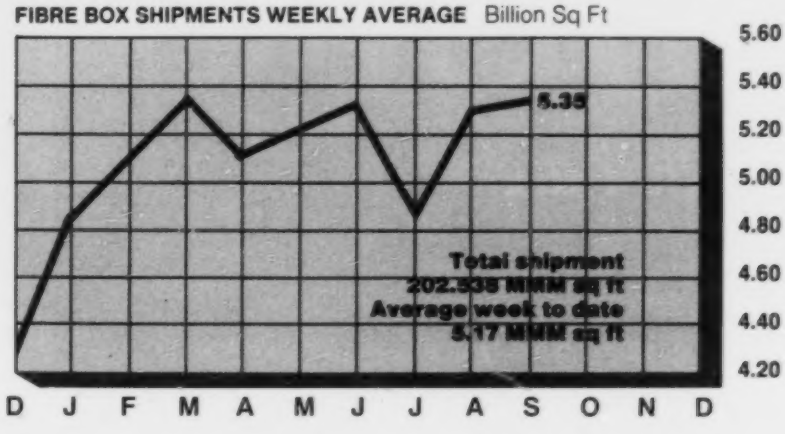
INDUSTRY STATISTICS FOR 1984

PAPERBOARD PRODUCTION WEEKLY AVERAGE 1000 Tons



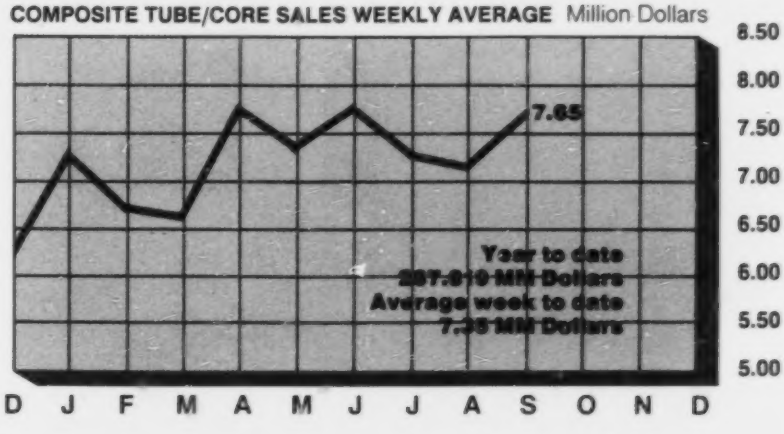
PAPERBOARD MILL OPERATIONS:
The first three quarters of 1984 concluded with average-week board output 8.4% ahead of same-period 1983 tonnage, compared with a 7.7% rise in '83 from '82, a 9.2% drop in '82 from '81, a 3.8% rise in '81 from '80, and a 1% drop in '80 from 1979—which until last year held the all-time-high yearly production record. Thus proceed the historical annual fluctuations, in the course of averaging out at the steady average expansion of approximately 3% per year. It is widely felt, however, that this continuing long-term strength may presage an increase.

FIBRE BOX SHIPMENTS WEEKLY AVERAGE Billion Sq Ft



PAPERBOARD-TYPE PRODUCTION:
In September, 2944.8 M total tons of output—up 8.4% from '83—appeared as 2218.4 M of containerboard grades—up 3.7%—according to projections from API's "production by furnish" data. This tonnage ratio of 3-to-1 compares unfavorably with the traditional 2-to-1 in what we had come to consider more-normal economic times. That seems to substantiate informal reports that improvements are less than robust in those packaging types produced from boxboard grades, but which are no longer reported by compilers.

COMPOSITE TUBE/CORE SALES WEEKLY AVERAGE Million Dollars



RIGID PAPER BOXES:
Three quarters of the way through 1984, major set-up boxmakers report only a fractional advance in total billings from 1983, compared with a strong rise of 10% in '83 from '82, an expectable decrease of 8% in recessive '82 from '81, following successive improvements of 10% in '81 from '80, of 6% in '80 over '79, and of 9% in '79 over '78. The general reduction in money available for non-essentials in recent years is clearly having an effect upon the rigid box, normally associated with much "luxury" packaging, and areas of high unemployment are much affected.

For more information on Royal Zenith, Circle No. 139 on Reader Inquiry Card →

paperboard packaging

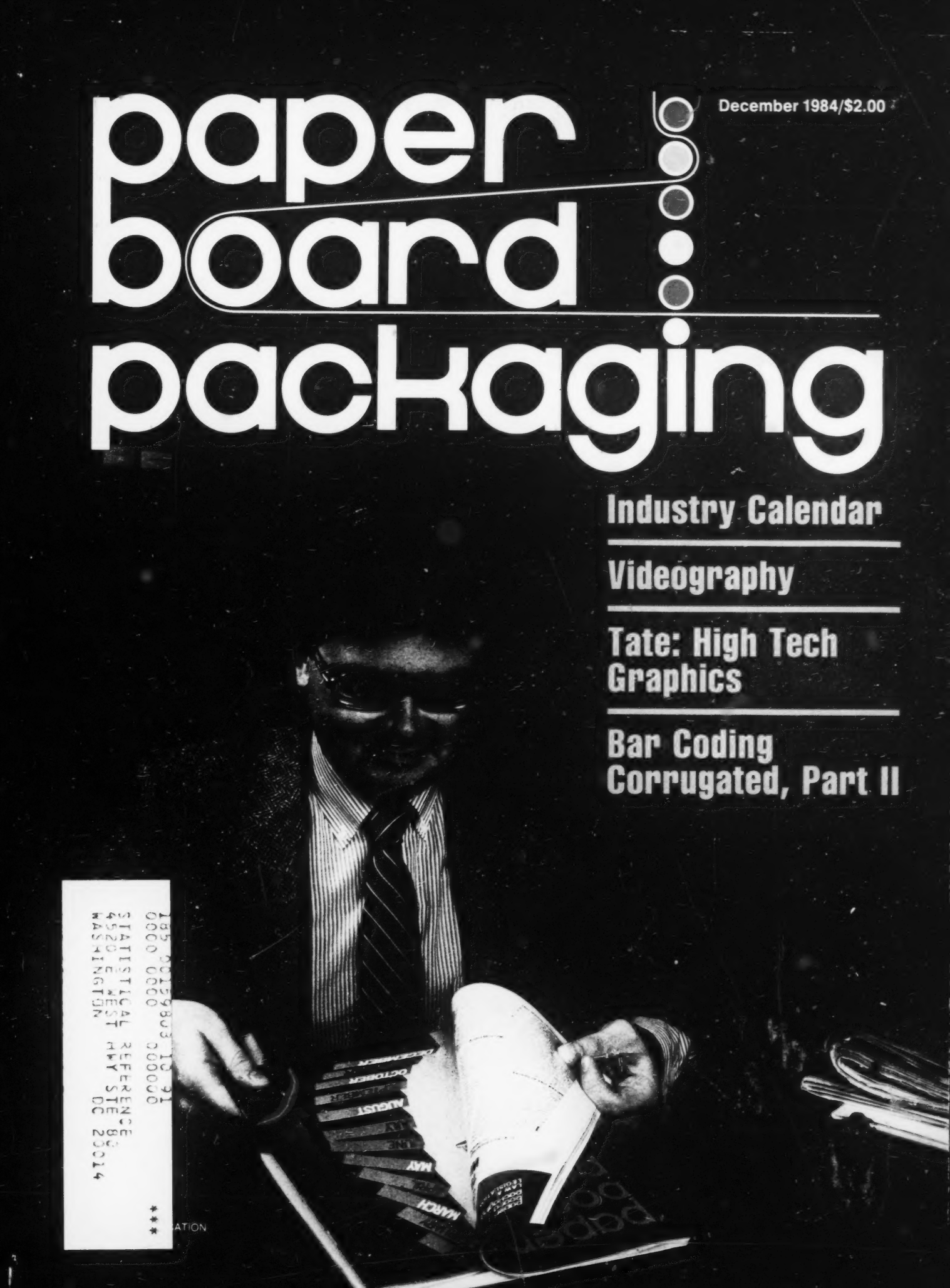
December 1984/$2.00

Industry Calendar

Videography

Tate: High Tech Graphics

Bar Coding Corrugated, Part II



paperboard packaging

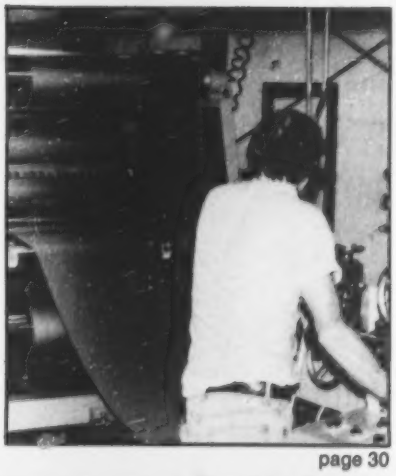
DECEMBER 1984, VOLUME 69, NO. 12

On the Cover:

Don't forget to tear out the functional and decorative 1985 Industry Calendar. Its comprehensive listing of industry events and general holidays makes it a must for any box plant.

FEATURES

page 18



page 30

page 64

PRINTING AND GRAPHICS

18 **A U.S. Case History: Bar Coding Corrugated**

People involved in bar coding say it's not very difficult to perform accurately and efficiently, it simply takes a little extra care and training.

EXCLUSIVE

26 **Industry Forum to Air Valuable Expert Dialogue**

As part of a *Paperboard Packaging* sponsored program, executives will gather regularly to analyze the challenges and changes influencing the paperboard converting industry.

PRINTING AND GRAPHICS

30 **Tate Containers Sets New Graphics Standard**

by Robert Gitlin

An Arkansas corrugated graphics plant uses folding carton manufacturing technology in a revolutionary, fresh approach to the market for highest-quality labeling and laminating.

PACKAGE DESIGN

64 **Package Design By Videography**

A Swiss-developed system of designing folding cartons in video studios is in its budding stage. Only a handful of people worldwide are able to claim expertise as of yet.

EQUIPMENT ENGINEERING

74 **Research Test Targets Stripping-Hammer Racket**

A test of retrofit components to control the noise made by stripping hammers shows that ears can be spared with the use of mufflers, shrouds, and damped chisels.

(continued on page 4)

PAPERBOARD PACKAGING (ISSN 0031-1227) is published monthly by Magazines For Industry, Inc., a subsidiary of Harcourt Brace Jovanovich Publications. Corporate and Editorial offices: 7500 Old Oak Boulevard, Cleveland, Ohio 44130. Advertising offices: 747 Third Avenue, New York, New York 10017 and 111 East Wacker Drive, Chicago, Illinois 60601. Accounting, Advertising Production and Circulation offices: 1 East First Street, Duluth, Minnesota 55802. Subscription rates: $18 per year in the United States; $25 per year in Canada. All other countries: $35 per year. Single copies (pre-paid only): $2 in the U.S.; elsewhere $4.50; add $3.00 for shipping and handling per order. Second class postage paid at Duluth, Minnesota 55806. Copyright © 1984 by Magazines For Industry, Inc., a subsidiary of Harcourt Brace Jovanovich, Inc. All rights reserved. No part of this publication may be reproduced or transmitted in any form or by any means, electronic or mechanical including photocopy, recording, or any information storage and retrieval system, without permission in writing from the publisher. Microfilm copies of articles are available through University Microfilm, International, 300 N. Zeeb Road, Ann Arbor, Michigan 48106.

POSTMASTER: Send address changes to PAPERBOARD PACKAGING, P.O. BOX 6269 Duluth, Minnesota 55806.

For reprint information, call Mary Ellen Seglem: 218-723-9373

FEATURES *continued*

page 82

MEETINGS AND CONVENTIONS

82 **CorrExpo and Workshops Are Resounding Success**

The Corrugated Containers Conference of the Technical Association of the Pulp and Paper Industry drew a worldwide attendance to Atlanta in October, setting some major records.

ADHESIVES AND STARCHES

84 **Starch additive Prevents "MacArthur Box" Woes**

Waterproofing improvements control "I shall return" boxes at the Barrington, N.J., plant of the Shipping Container and Containerboard Division of Weyerhaeuser.

DEPARTMENTS

6	Comment	91	People
8	News	94	Industry Events
14	Personal View	95	New Box Products
16	Industry Statistics	98	Classified Ads
80b	World News Briefs	103	Ad Index
86	Product of the Month	104	Publisher's Report
88	New Products	105	Reader Inquiry Cards

COMING

January: Industry Forum/Equipment Status

February: European Preprint/MSU School of Packaging

March: Merger Trend/Flexo News/AICC/Converflex

STAFF

Publisher ..... **Richard Perkins**
Editor ..... **Mark Arzoumanian**
Senior Editor ..... **Fred Sharring**
Associate Editor ..... **Robert Gitlin**
European Editor ..... **Robert Higham**
Consulting Editor ..... **Richard W. Porter**
Assistant Editor ..... **Shirley Harte**
Executive Editor ..... **Ben Miyares**
Production Supervisor ..... **Debra J. Bertelsen**
Production Manager ..... **Terri Sward**
Graphics Director ..... **Jon Dallman**
Graphic Designer ..... **Robert Andresen**
Circulation Supervisor ..... **Lil Pearson**
Reader Service Manager ..... **Gail Kessler**
Promotion Director ..... **Linda Winick**

Board of Contributing Editors

Training: Loren Ashwood, Consultant
Quality Assurance: George G. Maltenfort, Consultant
Administration: Allan S. Voluck, President, United Container Company
International:
France: Maurice Pariat, Consultant
UK: John A. Moore, Consultant
Australia: John Landman, Consultant

Editorial Offices

Paperboard Packaging
7500 Old Oak Boulevard, Cleveland, OH 44130 ☐ 216-243-8100 ☐ Telex: 968918
111 E Wacker Drive, Chicago, IL 60601 ☐ 312-938-2351
747 Third Avenue, New York, N.Y. 10017 ☐ 212-418-4145 ☐ Telex: 968918

Official Board Markets
111 E. Wacker Drive, 17th floor Chicago, IL 60601 ☐ 312-938-2335

Europe
HBJ Publications, 24-28 Oval Road, London NW1 7DX ☐ Telex: 25775

Marketing Sales Offices

Eastern
Ralph D. Wheeler ☐ 747 Third Avenue, New York, N.Y. 10017 ☐ 212-418-4145 ☐ Telex: 968918

Midwest & West Coast
Richard Perkins ☐ 111 E. Wacker Drive, Chicago, IL 60601 ☐ 312-938-2351
Brian McGoldrick ☐ 111 E. Wacker Drive, Chicago, IL 60601 ☐ 312-938-2338

Europe
Dee Wakefield ☐ HBJ Publications, 24-28 Oval Road, London NW1 7DX ☐ Telex: 25775

Japan
Sumio Oka ☐ International Media Rep., Ltd., 2-29 Toranomon 1-chome, Minato-ku, Tokyo. 105 Japan, 502-0656 ☐ Telex: J22633 ☐ Cables: MEDIAREP TOKYO

Harcourt Brace Jovanovich Publications

Robert L. Edgell, Chairman ☐ **Richard Moeller,** President ☐ **Lars Fladmark,** Executive Vice President ☐ **Arland Hirman,** Treasurer ☐ **Thomas Greney,** Senior Vice President ☐ **Ezra Pincus,** Senior Vice President ☐ **Joe Bilderbach,** Vice President ☐ **James Ghema,** Vice President ☐ **George Glenn,** Vice President ☐ **Harry Ramsley,** Vice President ☐ **Don Gussow,** V.P. Editorial

HBJ A HARCOURT BRACE JOVANOVICH PUBLICATION

BPA ABP